How do I interpret my WiFi speed test results?

There are many reasons as to why you should be regularly testing your WiFi speed at home; and, not for just the obvious instances where you find your WiFi signal strength is weaker than normal. Testing speed on a regular basis allows you to pinpoint performance trends, isolate which devices may be causing issues for your wireless network, and ensure no one is stealing your bandwidth. But, now that you've tested your WiFi speed, how do you interpret your WiFi speed test results?

How is WiFi speed measured?

If you've used any of the free speed test tools out there (see <u>Lifewire's updated list of the top free internet speed test sites</u>), you'll likely recognize the terms Download, Upload, and Ping:

- **Download:** The time it takes to pull data, measured in megabits per second (Mbps).
- **Upload:** The time it takes to send data, measured in megabits per second (Mbps).
- **Ping:** The time it takes between sending a request and receiving a response, measured in milliseconds (ms) and also referred to as *Latency*.

These are the primary three measures upon which your WiFi speed is tested. Your Download speed is ideally, and typically, the fastest because the majority of our online activities require we pull data from the internet. Upload speeds are important for interactive video calls and sending files to sites and services on the internet. Your ping speed dictates the quality of your voice and video calls, as well as your ability to play online games.

What is a good WiFi speed?

The <u>2018 Measuring Broadband America</u>, Fixed Broadband Report by the FCC provides detail as to what speeds were advertised by ISPs and what speeds were experienced by subscribers from September to October of 2017. Seeing what your ISP advertises as their Internet speed may be a good place to start when evaluating your own WiFi speed test results.

However, keep in mind that what constitutes a "good WiFi speed" boils down to several factors. One of these is which online activity you are trying to accomplish. Browsing the web, checking your email, streaming 4K video, and playing an online video game each require certain speeds to execute seamlessly and without interruption. (A fun fact: With Minim, users are provided a list of activities that are and are not possible at their network's given speed, in addition to in-depth bandwidth usage insights per device).

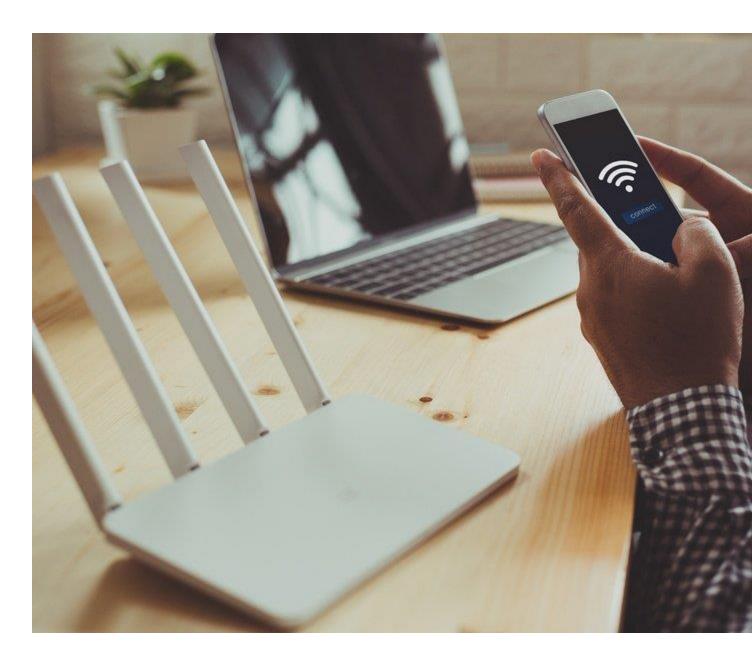
Regarding what speeds you need for these common activities, <u>BroadbandNow provides the minimum download speeds required</u> for each:

- 1-5 Mbps for checking email and browsing the web
- 15-25 Mbps for streaming HD video
- 40-100 Mbps for streaming 4K video and playing online games
- 200+ Mbps for streaming 4K video, playing online games, and downloading large files

According to the FCC, the average household needs a <u>minimum download</u> <u>speed of 25 Mbps</u> to perform basic functions like checking email and browsing the web with one OTT activity, such as streaming video.

Other factors that affect your WiFi speed test results can be the number of users, number of devices connected, and the frequency at which these devices are used. To get a better idea as to what WiFi speed you need in your household, BroadbandNow provides a <u>Speed Calculator</u> that takes into account each of these factors.

How can I increase my WiFi speed?



Luckily, there are several ways in which you can improve your WiFi speed test results. Here are some options:

- 1. **Check your router** Does your router support the <u>latest WiFi standard</u>? Is your router dual-band? If you answered no to either of these questions, you may want to consider upgrading your router to a newer model.
- 2. **Switch to a different WiFi channel** Some channels are more congested than others, so you may be able to improve your WiFi speed by switching to a WiFi channel that's less crowded.

- 3. **Use the 5 GHz band** If your router supports it, you may want to switch over to the 5 GHz band. Of the two <u>WiFi frequency bands</u>, 5 GHz WiFi provides less coverage but faster speeds, and there are also more WiFi channels to choose from than within the 2.4 GHz band.
- 4. Choose a strong WiFi password— What could be slowing down your network could very well be others from outside your household using your WiFi and stealing any available bandwidth. To prevent this, never leave your WiFi network unprotected and/or with the default username and password.
- 5. **Upgrade your WiFi network** To improve your WiFi speed test results, you may want to consider adding a <u>WiFi booster</u> to your network, or consider upgrading to a <u>mesh network</u>. The result of either option is stronger WiFi signal, which in turn can increase your WiFi speed.

To start, I recommend choosing one or two of the options above and running a second speed test— If you find your WiFi speed test results are better, that's great! If not, give another option a try and run another speed test to compare.